

REMARKS

Claims 1 - 16 are currently pending in the application, of which claims 1 and 6 are independent claims. Applicants propose to amend claims 1, 6 and 10 to clarify the claimed subject matter and to amend claim 4 to remove the word "a." Support for the amendments may be found at least at page 6, lines 2-8. In view of the Amendments, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections and objections for the reasons discussed below.

Claim Objections

Claims 1 and 6 were objected to because of informalities. In response, claims 1 and 6 have been amended to recite that the first sub-array light source is "functionally substitutable" instead of "may be substituted." The objections of claims 1 and 6 should now be withdrawn.

Rejection under 35 U.S.C. §103

The Office Action rejects Claims 1-16 under 35 U.S.C. §103 (a) over U.S. Patent No. 5,870,132 to Inoue, et al. ("Inoue") in view of U.S. Patent 6,252,622 to Laberge ("Laberge"). This rejection is respectfully traversed.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference or references, when combined, must disclose or suggest all of the claim limitations. The motivation to modify the prior art and the reasonable expectation of success must both be found in the prior art and not based upon a patent applicant's disclosure. *See in re Vaeck*, 947 F.2d 488, 20

USPQ2d 1438 (Fed. Cir.1991). Applicants submit that the references when combined do not disclose or suggest all the claimed limitations, as amended.

Claim 1 (and similarly claim 6) has been amended to recite, in part:

an array light source including at least a first and a second sub-array light sources, the second sub-array light source being used whereas the first sub-array light source remains unused, the first and second sub-array light sources each being configured to simultaneously emit a plurality of light beams with independently modulatable light intensity, wherein the first sub-array light source is functionally substitutable for the second sub-array light source (emphasis added)

However, neither Inoue, nor Laberge, either singly or in combination, disclose or suggest all these limitations.

Inoue does not disclose a first sub-array light source is functionally substitutable for a second sub-array light source. Moreover, Inoue does not disclose each sub-array being configured to simultaneously emit a plurality of light beams. Inoue, at best, provides a general background on laser printing.

Laberge shows discretely substituting one diode for another diode. This one-for-one substitution generates alignment problems because the lasers beams are no longer aligned. Accordingly, Laberge has to generate digital (timing) delays to compensate for this.

The invention has overcome the alignment problem by substituting a failed sub-array with another sub-array. On the other hand, Laberge and Inoue fail to disclose or suggest, alone or in combination, all the limitations of independent claim 1 (and similarly claim 6) including:

the first and second sub-array light sources each being configured to simultaneously emit a plurality of light beams with independently modulatable light intensity, wherein the first sub-

array light source is functionally substitutable for the second sub-array light source (Emphasis added)

This is because Inoue does not even contemplate laser failure. Laberge only shows only a single diode being substituted, but does not show a first and second sub-array, much less a first and second sub-array, each being configured to simultaneously emit a plurality of light beams, as required by claims 1 and 6. This simplistic substitution of one diode generates timing problems which are overcome by the approach taken by the present invention.

Accordingly, Laberge fails to cure the deficiencies of Inoue, and both claims 1 and 6 distinguish over the combination of Inoue and Laberge. Furthermore, not only do the applied references fail to disclose every claim feature, the references fail to provide any motivation that would lead one of ordinary skill in the art to combine the references in a manner set forth in the Official Action. The Examiner is respectfully requested to withdraw the rejection under 35 U.S.C. § 103.

Claims 2-5, and 7-16 are allowable at least for the reasons discussed above with respect to independent claims 1 and 6, from which they respectfully depend, as well as for their added features. Applicants respectfully request that the rejection of claims 1-16 be withdrawn.

Pursuant to MPEP §714.13, Applicants contend that entry of the present amendment is appropriate because the proposed amended claims avoid at least the objections set forth in the last Office Action, resulting in the application being placed in condition for allowance, or, alternatively, the revised claims place the application in better condition for purposes of appeal. Furthermore, the revised claims do not present any new issues that would require any further consideration and/or search by the Examiner, and the amendment does not present any additional

claims without canceling a like number of pending claims. Accordingly, entry of the present amendment is respectfully requested.

CONCLUSION

Applicants have made a sincere effort to place the present application in condition for allowance or better form for Appeal. Applicants have pointed out the specific language of Applicants' claims that define over the references of record and respectfully request an indication to such effect, in due course.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,



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